CALCIUM BY EDTA TITRIMETRIC METHOD — SM 3500-Ca B-1997 (2011)

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 3020.

Facility Name:_____VELAP ID_____

Assessor Name:_____Analyst Name:_____Inspection Date_____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
1. This method is not recommended for samples with Phosphorus > 50mg/L.	A.2				
2. Was samples preserved with HNO_3 to pH <2 or at least 24 hours prior to analysis?	40CFR136.3 Table 1I				
3. Were wastewater samples digested by SM 3030 E (HNO3/block digester/105°C/>2 hours) or SM 3030 I (HNO3/HCLO3/HF) prior to analysis by this method?	D.3.a 40CFR136.3 Table 1B				
4. Was an appropriate indicator specifically designed as an end point detector in EDTA titration of calcium used? ☐ Murexide ☐ Eriochrome Blue Black R ☐ Solochrome Dark Blue ☐ Other (identify) _____	D.2.b				
5. Was the 0.01 *M* EDTA titrant standardized against standard calcium solution as described in SM 2340C?	D.2.c				
6. Was 50 mL of sample, or smaller portion diluted to 50 mL so that calcium concentration is 5 to 10 mg?	D.3.b				
7. Were hard waters (alkalinity > 300 mg $CaCO_3$/L) treated by first diluting above OR by neutralizing the alkalinity with acid and then boiling for 1 minute prior to titrating?	D.3.b				
8. Was sufficient 1N NaOH added to the sample to produce a pH of 12 to 13?	D.3.c				
9. Were samples titrated immediately after adding the NaOH and an appropriate indicator?	D.3.b				
10. Was the titrant added slowly with continuous stirring?	D.3.c				
11. If Murexide was used as the indicator, were 1 or 2 excess drops of titrant added to make certain that no further color change occurred?	D.3.c				
Notes/Comments:					